

Correlation analysis of clinical and dynamic features of psychopathological conditions of patients in a multidisciplinary hospital

Gaukhar Jarilkasinova, and Nigina Mukhamadiyeva*

Bukhara State Medical Institute, Bukhara, Uzbekistan

Abstract. A significant increase in the number of mentally ill people in general somatic institutions indicates the relevance of creating a system of integrated specialized care for these populations. Despite the established high prevalence of psychopathology in general medical practice, underdiagnosis of such conditions still persists. The difficulty of identifying erased or subclinical forms of psychopathology for a somatic network specialist determines the difficulty of identifying and treating such patients with various somatic symptoms. A significant increase in the number of mentally ill people in general somatic institutions indicates the relevance of creating a system of integrated specialized care for these populations.

1 Introduction

According to the World Health Organization (WHO), the global trend at the beginning of the 21st century has been structural changes in psychiatric services, an emphasis on out-of-hospital forms, and the development and implementation of hospital-replacing models into practice [1]. Community-oriented psychiatry and psychosocial rehabilitation of mentally ill people are actively developing, the implementation of which becomes possible on the basis of a biopsychosocial model of psychiatric care using a multiprofessional approach and team forms of its provision. During this period, problems related to the development of standards for the diagnosis and treatment of mental disorders, professional standards for specialists, employment of people with disabilities, the organization of socially oriented types of assistance, and the economics of psychiatric care received the most frequent coverage in the periodical psychiatric literature concerning the organization of care [2-4].

According to large-scale studies conducted around the world, as well as in the European Union, "...the lifetime incidence of mental disorders in the population is 38.2%. The most common of these are anxiety disorders (14.0%), insomnia (7.0%), major depression (6.9%), somatoform disorders (6.3%), and substance dependence (more than 4%). The current incidence of mental disorders, according to research by German specialists, reaches 27.7%. The prevalence of mental disorders in people seeking medical help is even higher..." [5-9].

The aim of the study is to study the relationship between the clinical and dynamic course of pathopsychological conditions in the structure of somatic pathologies.

* Corresponding author: nigin76@mail.ru

2 Materials and methods of research

In accordance with the objectives of the study, the condition of patients (1066 observations) was analyzed at the time of examination, as well as at three and twelve months after completion of active hospital treatment. The cohort of patients who had the opportunity to be examined in subsequent periods of the study was analyzed. This group was formed from patients with pathologies of 8 classes according to ICD-10: K00-93, I00-99, J00-99, M00-99, E00-90, D50-89, G00-99, N00-99. The study was conducted using clinical-dynamic and experimental-psychological methods.

3 Results and discussions

Despite the presence of a similar leading mechanism of formation, somatogenic mental disorders include a wide range of psychopathological syndromes, which, in accordance with ICD-10, are divided into different categories (table 1).

Table 1. Clinical variants of mental disorders in the general sample.

| Syndromes of mental disorders | | Profile samples | | | | | | | | |
|------------------------------------|-------|----------------------|------------------|------------------|----------------------|------------------|----------------|------------------|------------------|---------------------|
| | | DO D n=1 33 | DCS n=1 03 | DRS n=1 17 | DM S n=1 15 | ESD n=1 08 | BD n=7 9 | DNS n=1 78 | DGS n=2 33 | Total n=10 66 |
| Asthenodepressive | Ab s. | 47 | 17 | 21 | 19 | 4 | 21 | 29 | 38 | 186 |
| | % | 35,3 | 16,6 | 17,9 | 16,5 | 3,7 | 26,6 | 16,3 | 16,3 | 17,4 |
| Anxious-depressive | Ab s. | 7 | 28 | 9 | 37 | 20 | 19 | 39 | 44 | 203 |
| | % | 5,3 | 27,2 | 7,7 | 32,2 | 18,5 | 24,1 | 22,0 | 18,9 | 19,0 |
| Anxious-phobic | Ab s. | 11 | 19 | 27 | 18 | - | 20 | 38 | 27 | 160 |
| | % | 8,3 | 18,4 | 23,2 | 15,7 | - | 25,3 | 21,3 | 11,6 | 15,0 |
| Depressive-hypochondriacal | Ab s. | 28 | 6 | 4 | 13 | - | | 8 | 15 | 74 |
| | % | 21,1 | 5,8 | 3,4 | 11,3 | - | | 4,5 | 6,4 | 6,9 |
| Psychopathic | Ab s. | 12 | - | 18 | 8 | 18 | 12 | 10 | 33 | 111 |
| | % | 9,0 | - | 15,4 | 6,9 | 16,7 | 15,2 | 5,6 | 14,2 | 10,4 |
| Conversion/hysterical syndrome | Ab s. | 16 | - | 21 | 5 | - | | - | 14 | 56 |
| | % | 12,0 | - | 17,9 | 4,4 | - | | - | 6,0 | 5,3 |
| Psychoorganic syndrome | Ab s. | 12 | 8 | 17 | 15 | 32 | 7 | 38 | 27 | 166 |
| | % | 9,0 | 7,8 | 14,5 | 13,0 | 29,6 | 8,8 | 21,3 | 11,6 | 15,6 |
| «Euphoric pseudodementia» syndrome | Ab s. | - | 9 | - | - | 13 | - | - | 31 | 53 |
| | % | - | 8,7 | - | - | 12,0 | - | - | 13,3 | 5,0 |
| Delusional disorder | Ab s. | - | 16 | - | - | 21 | - | 16 | 4 | 57 |
| | % | - | 15,5 | - | - | 19,5 | - | 9,0 | 1,7 | 5,4 |

When analyzing psychopathological syndromes, disorders were identified that verified the taxonomy of these syndromes proposed in clinical studies. According to Table 1, affective disorder was one of the main components in 4 polysyndromes; the presence of a depressive episode in the clinical picture of the disease led to many emotionally charged complaints with a negative, unpleasant coloring for the patient.

A mild form of depression (F32.0 according to ICD-10) is characterized by the presence of 2 main and 2 additional signs. The moderate form of DD (F32.1 according to ICD-10) is characterized by the presence of 2 main and 3-4 additional signs. The severe form of DD (F32.2 or F32.3 according to ICD-10) is characterized by the presence of 3 main and 4 or more additional signs, some of which are of pronounced intensity. Classic depression is defined by a tripartite set of symptoms: low mood (hypotymia, dysthymia, affective component), slowness of thinking (ideational inhibition) and motor retardation (motor component). DD is characterized by loss of joy, will, initiative, as well as a decrease in interests and performance.

Astheno-depressive syndrome was present in the somatic pathology clinic in all samples (17.4%). The samples of DOD (digestive organ diseases) and BD (blood diseases) had relatively high rates (35.3% and 26.6%, respectively). The structure of asthenic-depressive syndrome included the following components: increased exhaustion, in particular physical exhaustion, characterized by muscle weakness, fatigue, and decreased performance; drowsiness and sleep disturbance - daytime drowsiness with a lack of usual alertness; change in appetite, irritability, emotional lability, feeling of internal tension, increased sensitivity to various stimuli - hyperesthesia (light, sound, tactile stimuli). As a result of increased sensitivity, in some cases refusal of manipulation and continuation of treatment was noted. Somatovegetative disorders in the form of tachycardia, increased breathing, and increased sweating were also characteristic. The patients' complaints included absent-mindedness and memory loss, which was noticed by the patient himself. The patients' complaints were closely related to increased asthenia, which is interconnected with the severity and course of the somatic disease: an increase in asthenic disorders was noted during complications, deterioration of the patient's somatic condition, and a decrease - during the formation of compensation. In asthenic-depressive syndrome, in addition to the asthenic symptom complex, a depressive state took center stage. The clinical manifestation of this condition was a decreased background mood, which persisted regardless of what events occurred in the patient's life or changes in the somatic state. Symptoms of asthenia and depressive disorder complemented each other, which in turn led to a complication of the patient's somatic status. In the clinic of somatic diseases, a complex of various combinations of this range of disorders was observed.

Anxiety-depressive syndrome had relatively high rates (19%). This syndrome was also diagnosed in all samples, the highest rates were noted in the samples of DCS (diseases of the circulatory system), DMS (diseases of the musculoskeletal system), BD and DNS (diseases of the nervous system) (27.2%, 32.2%, 24.1%, 22.0% respectively). In this condition, the patients' complaints were directed toward anxiety, low, depressed mood, nothing made them happy, and what previously brought pleasure irritated and caused tears. There were also sleep disturbances in the form of restless night sleep with difficulty falling asleep, and the consequence of this was daytime sleepiness. With anxiety-depressive syndrome, a feeling of constant groundless anxiety was necessarily combined with the classic symptoms of depression - persistent low mood and hopelessness. Also, the behavior of the patients was dominated by irritability and nervousness or apathy. The patients showed no interest in their usual activities, were immersed in their own experiences, concentrated on their own somatic illness, there was short-term relaxation, which was immediately replaced by internal tension.

Anxiety-phobic disorder was observed in 11.6% of cases, and this symptom complex was observed in almost all study groups, except for the ESD group (endocrine system disease).

Clinical symptoms of anxiety-phobic syndrome were relatively more often observed in the samples of DRS (diseases of the respiratory system), BD, DNS (23.2%, 25.3% and 21.3%, respectively). The characteristic symptoms of the syndrome were an attack of fear, which was observed without objective reasons. Among the phobic disorders, patients observed fear of pollution, fear of contracting a “nosocomial infection,” fear of being incurably ill, fear of dying from a somatic illness, fear of going crazy. Misunderstanding and rejection of unreasonable fear by others led to problems in communication, and sometimes complete refusal him. As a result, the intensity of anxiety in the patient increased even more. When attacks of fear appeared, patients had a desire to protect themselves from the situation or people around them. Expectation of something bad, scary in anxiety-depressive disorder was often combined with characteristic somatovegetative manifestations: rapid heartbeat, lack of air, inability to concentrate, frequent urge to urinate, insomnia.

The next group consisted of depressive-hypochondriacal disorders (6.9%). Symptoms of depression with hypochondria were observed in almost all study groups, except for the ESD group. Unlike other samples, the DOD group had a high score in this area (21.1%). With this type of disorder, the subjects considered themselves terminally ill. With hypochondriacal depression, depressed mood was combined with anxious fears for one's health, sometimes even panic reactions. Patients overestimated the severity of somatic symptoms, excessive emphasis was placed on the somatic condition, and there was fear of the imaginary consequences of a “somatic” illness and its unfavorable outcome. In connection with self-observation, patients pointed out the slightest signs of bodily distress, demanded to measure blood pressure, count the pulse, etc. Fearing an exacerbation of the disease or possible complications, patients tried to establish a gentle daily routine, diet, and special postures to bring relief to the functioning of the diseased organ. Despite the objectively relatively satisfactory somatic condition, the patients complained of deterioration of their condition, feelings of hopelessness, and helplessness. Any attempts to replace the medication caused objections from the patient. And in some cases, even a slight change in condition (heart rate and respiratory rate, blood pressure) was accepted as the ineffectiveness of the drug, and patients demanded a new treatment regimen.

Psychopathic-like syndrome was observed in 10.4% of cases. Mental disorders in this register were identified in all profile groups, except for the DCS group. Especially the samples of DRS, ESD, BD and DGS (diseases of the genitourinary system) had significant indicators than other groups of patients (15.4%, 16.7%, 15.2% and 14.2%, respectively). Pathocharacterological signs and sometimes overvalued ideas played a dominant role in the clinical picture. Patients showed non-compliance with medical recommendations, tried to cancel or independently take certain medications, and radically change their treatment regimen and daily routine. Some patients showed litigious tendencies, which were sometimes associated with symptoms of aggravation of a somatic disease, conversion symptoms in the form of pain, “heaviness” in the chest area associated with emotional stress, a feeling of a “lump” in the throat, etc. In some cases, patients complained about health care workers. At the same time, in the behavior of patients, there was a conviction in the need to correct or cancel the established diagnosis and conduct “correct” instrumental examinations, revise treatment tactics, and these requirements were often combined with non-compliance with doctor's instructions and refusal of further treatment in the department.

Conversion/hysterical syndrome was diagnosed in 5.3% of observed individuals. Conversion disorders were identified only in 4 groups - DOD, DRS, DMS and DGS and had relatively low values (12.0%, 17.9%, 4.4% and 6.0%, respectively). The clinical picture of this variant was characterized by a complex of symptoms in which the patient seemed to no longer feel physical pain or his emotions, characterized by paresthesia, lack of sensitivity in various parts of the body, sometimes loss of smell, lack of air in the form of an attack of suffocation. Patients complained of periodic inability to move their limbs, poor coordination,

and dizziness. However, most conversion symptoms were short-term in nature and were observed for a relatively short time.

In more than 1/6 of the surveyed population (15.6%), the leading symptom complex turned out to be a psychoorganic syndrome, which was diagnosed in all profile samples. However, more than half of this category consisted of groups of subjects from the profile samples of EDS and DRS (29.6% and 21.3%, respectively). The clinical picture of this group included a number of disorders associated with impairments of cognitive functions, as well as the emotional-volitional sphere. Disorders of intellectual activity had the following manifestations: a decrease in its overall productivity, a violation of certain cognitive functions - memory, attention, thinking. There was a clear decrease in the rate of cognitive processes and impoverishment of speech. Emotional instability, viscosity, incontinence of affect, sometimes dysphoric reactions, difficulty in self-control of behavior indicated disturbances in the emotional-volitional sphere.

The syndrome of “euphoric pseudodementia” made up a small part (5% of all) psychopathological disorders. Only some samples had indicators for this group of psychopathological disorders - DCS, ESD and DGS (8.7%, 12.0% and 13.3%, respectively). This category of disorders was characterized by increased affect, often with complacency, an optimistic, and at the same time inadequate assessment of both the current somatic state and the consequences of the disease. They were characterized by active behavior and excessive energy, while the patients showed a desire for activity. When explaining the expected real danger associated with somatic pathology, patients tried not to worry, sometimes even ignore the expected negative outcomes of the disease; they did not particularly worry and were not concerned about severe, sometimes life-threatening disorders of the body; did not perceive themselves as a “serious” patient. Ignoring the persuasion of relatives and medical personnel, patients violated the regime and allegedly forgot about the importance of taking medications. Despite the unfavorable prognosis, they made long-term plans for the future and actively told others about it.

Delusional disorder was identified in 5.4% of cases. The clinical picture had elements of hypochondria, which did not tend to reduce. The patient's behavior was aimed at completely eliminating the consequences of the disease or maintaining the functioning of the body at the level established as a result of the disease. This syndrome was observed in profile samples of DCS, ESD, DNS and DGS (15.5%, 19.5%, 9.0% and 1.7%, respectively). At the same time, the dominant idea was to overcome the disease with the complete restoration of somatic and social status, and even eliminate the causes of the disease. Patients considered themselves capable of changing the course of events by performing excessive physical activity even contrary to medical recommendations. In the structure of this category of disorders there were also ideas of attitude, in a number of cases there was a combination with the phenomena of social phobia. With the latter, avoidant behavior was found, limiting the circle of communication with relatives, sometimes even ignoring their presence. When it was necessary to visit the general part of the somatic department, patients noticed “perplexed”, “disgust” looks from others, associated with “noticeable” or unpleasant, “repulsive” manifestations of somatic disease. Patients noticed an allegedly changed attitude of loved ones - “discounted”, “hostile attitude”, “his opinion is not considered.” In some cases, patients expressed ideas about insufficient attention from the attending physician - “they are deliberately kept in the department for a long time,” “they are cared for differently than other patients,” “they use low-quality medicine only for him.”

In order to clarify the relationship between the formation and manifestation of psychopathological syndromes in the structure of somatic diseases, a correlation analysis was carried out in profile samples (Table 2). When analyzing the data in Table 2, the results of the correlation between the manifestations of somatic and mental pathology were obtained with some regularity. Not all studied groups had reliably significant indicators. However, in

all categories, several direct correlations were obtained between somatic pathology and mental disorders, which once again confirms the parallelism of the two spheres (soma and psyche).

Table 2. Correlation analysis of psychopathological syndromes in the structure of profile samples at the time of examination.

| Syndromes of mental disorders | DOD n=133 | DCS n=103 | DRS n=117 | DMS n=115 | ESD n=108 | BD n=79 | DNS n=178 | DGS n=233 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|
| Anxious-depressive | 0,10 | 0,86* | 0,36 | 0,19 | 0,35 | 0,13 | 0,16 | 0,10 |
| Anxious-phobic | 0,31* | 0,09 | 0,38* | 0,06 | - | 0,46* | 0,39 | 0,93* |
| Depressive-hypochondriacal | 0,09 | 0,03 | 0,32 | 0,41* | - | - | 0,43* | 0,55* |
| Psychopathic | 0,03 | - | 0,50 | 0,08 | 0,06 | 0,02 | 0,03 | 0,25 |
| Conversion/hysterical syndrome | 0,23 | - | 0,58* | 0,6* | - | | | 0,14 |
| Psychoorganic syndrome | 0,13 | 0,32 | 0,15 | 0,06 | 0,72* | 0,22 | 0,75* | 0,39 |
| «Euphoric pseudodementia» syndrome | - | 0,16 | - | - | 0,27 | - | - | 0,60* |
| Delusional disorder | - | 0,29 | - | - | 0,64* | - | 0,42* | 0,02 |

Note: * significance level $p < 0.05$

Each profile sample had several significant correlations with a significance level of $p < 0.05$. Only the group of patients with CVS pathology (DCS group) had a statistically significant relationship in terms of correlation with the formation of ADD, which showed a strong direct connection ($r = 0.86$). It is important to note that in terms of the development of anxiety-phobic disorders, several profile samples had reliable indicators: a weak direct correlation was found in the groups of DOD, DRS and BD ($r = 0.31$, $r = 0.38$ and $r = 0.46$), very strong correlation in the group of patients with pathology of the genitourinary system (DGS group) ($r = 0.93$). The groups of patients with DMS and DNS had relatively weak significant indicators for the development of depressive-hypochondriacal disorders ($r = 0.41$ and $r = 0.41$, respectively), and there was also a statistically significant average correlation in the BMS group ($r = 0,55$). The group of patients with pathology of the respiratory system (DRS group) and the musculoskeletal system (DMS) had more pronounced conversion disorders ($r = 0.58$ and $r = 0.60$, respectively).

The profile groups ESD and DNS had a strong correlation with the development of psychoorganic syndrome ($r = 0.72$ and $r = 0.75$, respectively). The syndrome of “euphoric pseudodementia” was reliably noted only in the profile sample of the DGS ($r = 0.60$). The group of patients with pathology of the endocrine system (ESD group) and with pathology of the nervous system (DNS group) had a moderate and weak correlation with the category of delusional states ($r = 0.64$ and $r = 0.42$, respectively).

Some correlations in profile samples showed themselves to be relatively weak, but this analysis was a necessary step to distinguish unreliable trends from statistically significant ones.

The syndromic picture of psychopathology in profile samples at the time of examination of patients was shown in Tables 1-2. When studying the relationship between the somatic and mental spheres of patients in specialized groups, reliable indicators were obtained indicating the statistical significance of some indicators. In order to further dynamically study the status of patients, the somatic and mental status of the examined patients was analyzed within 3 months after discharge from the hospital (Table 3).

Table 3. Distribution of patients according to clinical variants of CR within 3 months after discharge from hospital.

| Syndromes of mental disorders | | Profile samples | | | | | | | | |
|-------------------------------|-----|-----------------|------------------|------------------|----------------------|------------------|----------------|------------------|------------------|---------------------|
| | | DOD n=133 | DCS n=10 3 | DRS n=11 7 | DM S n=11 5 | ESD n=10 8 | BD n=7 9 | DNS n=17 8 | DGS n=23 3 | Total n=10 66 |
| Asthenodepressive | Abs | 19 | 8 | 9 | 10 | 2 | 15 | 19 | 7 | 89 |
| | % | 14,3 | 7,8 | 7,7 | 8,7 | 1,9 | 19,0 | 10,7 | 3,0 | 8,3 |
| Anxious-depressive | Abs | 3 | 13 | 3 | 19 | 12 | 7 | 17 | 15 | 89 |
| | % | 2,3 | 12,6 | 2,6 | 16,5 | 11,1 | 8,9 | 9,6 | 6,4 | 8,3 |
| Asthenophobic | Abs | 4 | 9 | 6 | 10 | 3 | 13 | 11 | 31 | 87 |
| | % | 3,0 | 8,7 | 5,1 | 8,7 | 2,8 | 16,4 | 6,2 | 13,3 | 8,2 |
| Asthenophobic | Abs | 6 | 3 | 7 | 4 | 4 | 4 | 10 | 12 | 50 |
| | % | 4,5 | 2,9 | 6,0 | 3,5 | 3,7 | 5,1 | 5,6 | 5,2 | 4,7 |
| Psychopathic | Abs | 7 | 7 | 6 | 3 | 6 | 5 | 14 | 24 | 72 |
| | % | 5,2 | 6,8 | 5,1 | 2,6 | 5,6 | 6,3 | 7,8 | 10,3 | 6,8 |
| Neurosis-like | Abs | 15 | 11 | 12 | 17 | 9 | 27 | 29 | 65 | 185 |
| | % | 11,3 | 10,7 | 10,3 | 14,8 | 8,3 | 34,2 | 16,3 | 27,9 | 17,4 |
| Psychoorganic syndrome | Abs | 6 | 4 | 6 | 4 | 19 | 6 | 31 | 13 | 89 |
| | % | 4,5 | 3,9 | 5,1 | 3,5 | 17,6 | 7,6 | 17,4 | 5,6 | 8,3 |
| Delusional disorder | Abs | - | 5 | - | - | 4 | - | 5 | - | 14 |
| | % | - | 4,8 | - | - | 3,7 | - | 2,8 | - | 1,3 |
| No MD | Abs | 73 | 43 | 68 | 48 | 49 | 2 | 42 | 66 | 391 |
| | % | 54,9 | 41,8 | 58,1 | 41,7 | 45,3 | 2,5 | 23,6 | 28,3 | 36,7 |

It turned out that 3 months after discharge from the hospital, the patients showed some changes in the clinical picture of psychopathological syndromes. Only in 36.7% (391 observations) elements indicating certain psychopathological syndromes were not noted.

Syndromic assessment of PR in patients of the general sample indicates that among the main syndromes, the most common were asthenic disorders, which were detected in 24.8% of cases - asthenodepressive, asthenohypochondriacal, asthenophobic syndromes. It is important to note the transformation of polysyndromes with the presence of depressive disorders in the structure. At the same time, the clinical picture of these syndromes, in particular depressive-phobic, depressive-hypochondriacal syndrome, moved to another category with an asthenic symptom complex. This condition included a number of clinical symptoms - weakness, lethargy, fatigue, rapid physical exhaustion, a feeling of inadequacy, a feeling of loss of energy, weakening and impoverishment of impulses to activity, decreased activity, which, in combination with other psychopathological disorders, formed an unfavorable background for the socio-psychological functioning of the patient. The second most common syndrome was neurosis-like syndrome (17.4%). An interesting fact was that NS was not initially diagnosed in the overall study sample of patients. The clinical picture of this syndrome consisted of obsessive, compulsive, and conversion disorders with somatovegetative symptoms. Much less often, psychoorganic syndrome of varying severity (8.3%) and delusional disorder (1.3%) were the main ones.

Psychopathological syndromes identified in patients of the general sample, along with the main syndromes, also included other PPS as comorbid ones, the combination of which

depended on a number of factors. In order to clarify the relationship between the formation and manifestation of psychopathological syndromes in the structure of somatic diseases, a correlation analysis was carried out in profile samples (Tab.4).

Table 4. Correlation analysis of psychopathological syndromes in the structure of profile samples (within 3 months).

| Syndromes of mental disorders | DOD n=133 | DCS n=103 | DRS n=117 | DMS n=115 | ESD n=108 | BD n=79 | DNS n=178 | DGS n=233 |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|
| Astheno-depressive | 0,34 | 0,01 | 0,15 | 0,34 | 0,20 | 0,04 | 0,15 | 0,17 |
| Anxious-depressive | 0,15 | 0,87* | 0,07 | 0,45* | 0,13 | 0,18 | 0,13 | 0,34 |
| Asthenophobic | 0,29 | 0,29* | 0,00 | 0,06 | 0,18 | 0,25* | 0,02 | 0,93* |
| Astheno-hypochondriacal | 0,39 | 0,23 | 0,09 | 0,35* | 0,20 | 0,15 | 0,49* | 0,02 |
| Psychopathic | 0,95* | 0,12 | 0,04 | 0,09 | 0,01 | 0,06 | 0,02 | 0,12 |
| Neurosis-like | 0,56* | 0,12 | 0,22* | 0,11 | 0,22 | 0,03 | 0,05 | 0,45* |
| Psychoorganic syndrome | 0,11 | 0,27* | 0,12 | 0,11 | 0,49* | 0,04 | 0,38* | 0,34 |
| Delusional disorder | 0,14 | 0,04 | 0,05 | 0,17 | 0,30 | 0,26 | 0,14 | 0,21 |
| No MD | 0,03 | 0,01 | 0,15 | 0,15 | 0,20 | 0,04 | 0,15 | 0,17 |

Note: * significance level $p < 0.05$

When analyzing the data in Table 4, the results of the correlation between the manifestations of somatic and mental pathology were obtained with some regularity. Not all studied groups had reliably significant indicators. However, in all categories, 1-2 direct correlations were obtained between somatic pathology and mental disorders, which once again confirms the mutual influence of the somatic and mental status of patients.

Each profile sample had several significant correlations with a significance level of $p < 0.05$. The group of patients with gastrointestinal pathology (DOD group) had the greatest correlation in terms of correlation with the formation of psychopathic-like disorders ($r=0.95$), and an average correlation was noted with neurosis-like disorders ($r=0.56$). The highest indicator for the significance of ADD was shown by the group of patients with CVD diseases (DCS group) ($r=0.87$); there was also a statistically significant weak correlation with asthenophobic ($r=0.29$) and psychoorganic syndrome ($r=0,27$). The group of patients with pathology of the respiratory system (DRS group) had more pronounced neurosis-like disorders ($r=0.22$). The profile sample of DMS had an average direct significant correlation with anxiety-depressive disorders ($r=0.45$) and astheno-hypochondriacal syndrome ($r=0.35$). The highest correlation with the development of psychoorganic syndrome was found in the sample of ESD, the degree of disturbances of which can be attributed to the most significant markers of disorders of the patient's mental status ($r = 0.49$). The next place in the development of psychoorganic syndrome was occupied by the DNS group ($r=0.38$), although it was in the dominant position in the formation of astheno-hypochondriacal disorders ($r = 0.49$). Neurosis-like disorders were relatively often correlated with urogenital pathology ($r=0.45$). However, this profile group (DGS) had the highest correlation with the category of asthenophobic conditions ($r=0.93$). This category of MD had a weak but direct correlation with the profile sample of BD ($r=0.25$).

It should be noted that at the time of the examination the formation of some psychopathological syndromes in profile samples was not identified (Table.5).

Table 5. Distribution of patients according to clinical variants of CR 12 months after discharge from hospital.

| Syndromes of mental disorders | | DOD n=13 3 | DCS n=10 3 | DRS n=11 7 | DMS n=11 5 | ESD n=10 8 | BD n=7 9 | DNS n=17 8 | DGS n=23 3 | Total n=106 6 |
|-------------------------------|-----|------------------|------------------|------------------|------------------|------------------|----------------|------------------|------------------|---------------------|
| Anxious-depressive | Abs | 3 | 13 | 3 | 19 | 12 | 7 | 17 | 15 | 89 |
| | % | 2,3 | 12,6 | 2,6 | 16,5 | 11,1 | 8,9 | 9,6 | 6,4 | 8,3 |
| Neurosis-like | Abs | 15 | 11 | 12 | 17 | 9 | 27 | 29 | 65 | 185 |
| | % | 11,3 | 10,7 | 10,3 | 14,8 | 8,3 | 34,2 | 16,3 | 27,9 | 17,4 |
| Psychoorganic sm | Abs | 6 | 4 | 6 | 4 | 19 | 6 | 31 | 13 | 89 |
| | % | 4,5 | 3,9 | 5,1 | 3,5 | 17,6 | 7,6 | 17,4 | 5,6 | 8,3 |
| No PR | Abs | 109 | 75 | 96 | 75 | 68 | 39 | 101 | 140 | 703 |
| | % | 81,9 | 72,8 | 82,0 | 65,2 | 62,9 | 49,3 | 56,7 | 60,0 | 65,9 |

But during dynamic observation, the identification of some initially unformed syndromes was noted, as well as the transformation of a number of psychopathological syndromes with a modification of the clinical picture. And the most important point is that in all profile samples, even with insignificant correlations, all categories of psychopathological syndromes were identified.

The next stage in achieving this goal was to study the further transformation of psychopathological conditions in the structure of somatic pathology within 12 months after discharge from the hospital (Table 5). Analysis of this table showed that 12 months after discharge from the hospital, cardinal changes in the clinical picture of the psycho- and somatic status of the patients were noted in the study group of patients. The main contingent of the general sample of patients were included in the group of recovered patients. Disorders with depression, anxiety, and phobia moved to the neurotic level of disorders and were characterized as subclinical forms. However, psychoorganic disorders, neurosis-like disorders and anxiety-depressive disorders stay stable in the status of patients, even within a year. As a result, in 65.9% (703 observations) of cases, elements indicating certain psychopathological syndromes were not noted.

Understanding that the patient has a serious illness, fear of a recurrence of the somatic illness, the inability to internally change the attitude towards the disease and the lack of objective information about the disease and its consequences leads to an internal psychological imbalance that disrupts the patient's emotional response, which leads to depressive and neurotic disorders. It is obvious that internists and psychiatrists should pay special attention to developing a psychocorrectional plan for this group of patients.

4 Conclusions

Thus, summing up the analysis of the clinical features of mental disorders that arise in the structure of a somatic disease, we can draw, in our opinion, a number of important conclusions:

- the vast majority of patients experience, upon initial diagnosis, asthenic and depressive disorders of a clinically pronounced nature;
- the highest frequency of all identified psychopathological conditions falls on the share of psychoproductive disorders, which should cause the greatest caution of the doctor supervising the patient regarding the risk of developing somatopsychoses;

- according to the typology of affect, anxiety disorder is the most common among mental disorders;
- cases of detection of depression associated with anxiety should deserve special attention, due to the increased risk of developing agitation and committing auto-aggressive and outwardly directed aggressive actions;
- when clinically pronounced forms of mental disorders develop, it is advisable to take therapeutic measures to prevent the occurrence of manifestations of acute or prolonged psychosis;
- the duration of some mental disorders can be up to one year from the moment of their onset, and in the vast majority of cases the severity of mental disorders either gradually decreased until complete reduction, or (in cases of initially mild symptoms) remained at the original level. In order to reduce mental disorders, it is advisable to use psychocorrective measures in the first days.

References

1. F. Nurutdinova, Z. Tuksanova, Y. Rasulova, E3S Web of Conferences **474**, 01002 (2024)
2. D. S. Kudratova, G. A. Ikhtiyarova, S. S. Davlatov, International Journal of Pharmaceutical Research **13(1)**, 756-760 (2020)
3. N. B. Mukhamadiev, S. A. Tuksanov, An International Multidisciplinary Research Journal **5(12)**, 533-537 (2022)
4. N. B. Mukhamadiev, Sh. A. Tuksanov, Europe's Journal of Psychology **17(3)**, 371-375 (2021)
5. N. B. Mukhamadiev, European Journal of Molecular and Clinical Medicine **7(11)**, 418-426 (2020)
6. F. Oripov, S. Blinova, T. Dekhkanov, S. Davlatov, International Journal of Pharmaceutical Research **13(1)**, 299-301 (2020)
7. F. S. Oripova, G. A. Ikhtiyarova, K. Shukurlaev, M. T. Khamdamova, Annals of the Romanian Society for Cell Biology **25(4)**, 1865-1872 (2021)
8. F. Sh. Oripova, G. A. Ikhtiyarova, S. S. Davlatov, International Journal of Pharmaceutical Research **13(1)**, 761-765 (2021)
9. N. A. Qurbonov, S. S. Davlatov, K. E. Rakhmanov, A. F. Zayniyev, Annals of the Romanian Society for Cell Biology **25(4)**, 1927-1932 (2021)
10. K. E. Rakhmanov, S. S. Davlatov, D. Sh. Abduraxmanov, International Journal of Pharmaceutical Research **13**, 4044- 4049 (2020)
11. Z. Y. Saydullaev, S. S. Davlatov, Z. I. Murtazaev, K. E. Rakhmanov, Annals of the Romanian Society for Cell Biology **25(4)**, 1956-1961 (2021)
12. A. M. Shamsiev, Zh. A. Shamsiev, K. E. Rakhmanov, S. S. Davlatov, Experimental and Clinical Gastroenterology **174(5)**, 72-77 (2020)
13. E. M. Shukurov, A. P. Alimov, Z. E. Sapaev, M. F. Kadirov, B. X. Kamalov, J. J. Akbarxonov, S. S. Davlatov, International Journal of Pharmaceutical Research **13**, 2517-2521 (2021)
14. D. S. Sulaymonovich, R. Q. Erdanovich, S. Z. Yaxshiboyevich, S. U. Akhrarovich, International Journal of Pharmaceutical Research **12**, 1008-1012 (2020)
15. S. J. Teshayev, R. R. Baymuradov, N. K. Khamidova, D. A. Khasanova, International Journal of Pharmaceutical Research **12(3)** (2020)

16. S. Z. Tshaev, D. A. Khasanova, Russian Journal of Operative Surgery and Clinical Anatomy **3(2)**, 19–24 (2019)
17. S. Z. Tshaev, D. A. Khasanova, Russian Journal of Operative Surgery and Clinical Anatomy **4(1)**, 41–45 (2020)
18. Sh. Zh. Tshaev, R. R. Baimuradov, Russian Journal of Operative Surgery and Clinical Anatomy **4(2)**, 22–26 (2020)
19. S. J. Tshayev, D. K. Khudoyberdiyev, S. S. Davlatov, International Journal of Pharmaceutical Research **13(1)**, 679-682 (2021)
20. S. V. Yanchenko, A. V. Malyshev, S. Zh. Tshaev, L. M. Petrosyan, S. Sh. Ramazonova, Oftalmologiya **20(4)**, 772–779 (2023)
21. S. V. Yanchenko, A. V. Malyshev, Sh. Zh. Tshaev, R. R. Boboeva, G. B. Juraeva, Oftalmologiya **20(4)**, 780–786 (2023)